

REMARKS/ARGUMENTS

By this Amendment, claim 17 is amended to incorporate the limitations of claim 29 and claim 29 is canceled. Claims 17, 22-24, 27-28 and 30-36 are pending.

Favorable reconsideration is respectfully requested in view of the following remarks.

Additionally, Applicants respectfully request the Examiner to contact the undersigned to schedule an interview prior to issuing any further office actions in this matter.

Rejections under 35 U.S.C. § 103(a)

Claims 17-21, 22-24 and 29-36 stand rejected under 35 U.S.C. § 103(a) as allegedly being obvious over U.S. Patent No. 4,299,920 to Peters in view of U.S. Patent No. 4,441,793 to Elkins and further in view of U.S. Patent No. 6,645,434 to Muramatsu et al. This rejection is respectfully traversed.

Claim 17 requires a reaction substrate in the form of a microtiter plate or a nanotiter plate with a glass plate having a thickness of about 150 μm as a base of the reaction substrate. The Peters and Elkins references do not disclose the use of a base comprising a glass plate with this thickness. The Office attempts to remedy this deficiency of the Peters and Elkins references by substituting the "cover glass" of the sample observation plate of Muramatsu, which has a thickness of nearly 170 μm .

On the priority date of the present patent application, it was well-known in the art that tools for high throughput screening (HTS) procedures, like reaction substrates, have to fulfill special requirements with regards to size, thickness and stability. A person having ordinary skill in the art at the time of the invention (PHOSITA) would have possessed technical knowledge in the fields of microscopy and HTS procedures, and would have known that the glass slides used

in microscopy, such as those disclosed by Muramatsu et al., are very fragile objects. Even with the standard handling of such glass slides, like e.g., for mounting and viewing a specimen in a biological laboratory, there is always the risk of breaking the glass slide.

A PHOSITA would have lacked motivation to combine, with a reasonable expectation of success, a glass slide having a thickness of about 150 nm with an adhering flexible compartment layer. The connection of the compartment layer with the glass plate (or slide) is based on adhesion forces. A PHOSITA would have expected the glass plate to break under the influence of these adhesion forces during the placement of the compartment layer on the glass plate and/or during the step of peeling off the compartment layer. Glass plates for microscopy were known to be fragile, as evidenced by the teachings of, e.g., U.S. Patent No. 4,427,634 at column 3, lines 37-38 ("The use of prior fragile, slippery glass slides is entirely eliminated."); U.S. Patent No. 5,292,000 at column 1, lines 19-22 ("These items are intended to protect the relatively fragile glass slide and to preserve the specimen smeared or deposited on the slide against contamination or physical damage."); U.S. Patent No. 6,014,210 at column 2, lines 20-22 ("However, slides are difficult to handle. They are difficult to pick up, hold and store. They are relatively fragile and may cause wounds in the form of cuts."); and U.S. Patent No. 6,908,678 at column 1, lines 15-17 ("It has been noted, however, that glass slide has several disadvantages as a substrate of biochips. Firstly, glass slide itself is fragile and has to be handled carefully."). The expectation of failure suggested by the known fragility of glass plates clearly would have outweighed any alleged motivation to examine slides with various types of microscopes (i.e., the motivation to combine alleged in the Office Action at page 4). See, e.g., MPEP 2143.01, which states:

The test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art, and all teachings

in the prior art must be considered to the extent that they are in analogous arts. Where the teachings of two or more prior art references conflict, the examiner must weigh the power of each reference to suggest solutions to one of ordinary skill in the art, considering the degree to which one reference might accurately discredit another.

The expectation of failure would have been even higher in view of the need to repeatedly adhere and remove the compartment layer through multiple iterations of an HTS procedure, particularly where the compartment layer is used in conjunction with a glass plate having a relatively large surface area to form microtiter or nanotiter plates adapted to receive numerous samples.

Accordingly, the claimed invention is not obvious because a PHOSITA would not have combined, with a reasonable expectation of success, a glass slide having a thickness of about 150 nm with an adhering flexible compartment layer to produce a reaction substrate in the form of a microtiter or nanotiter plate adapted to receive numerous samples.

Accordingly, reconsideration and withdrawal of the obviousness rejection are respectfully requested.

Claims 27-28 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Peters, Elkins and Muramatsu et al. in view of U.S. Patent No. 6,037,168 to Brown. This rejection is respectfully traversed.

The combination of Peters, Elkins and Muramatsu et al. fails to make a prima facie case of obviousness for the reasons noted above. Brown does not remedy this deficiency of the other cited references. That is, Brown would not have provided a PHOSITA with a reasonable expectation of success to make the proposed combination of teachings to reach the claimed invention.

Application No. 10/089,841
Amendment Dated 11/26/2007
Reply to Office Action of 6/27/2007

Accordingly, reconsideration and withdrawal of the obviousness rejection of claims 27-28 are respectfully requested.

For at least the reasons set forth above, it is respectfully submitted that the above-identified application is in condition for allowance. Favorable reconsideration and prompt allowance of the claims are respectfully requested.

Should the Examiner believe that anything further is desirable in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,

CAESAR, RIVISE, BERNSTEIN,
COHEN & POKOTILOW, LTD.

November 26, 2007

By 

David M. Tener
Registration No. 37,054
Customer No. 03000
(215) 567-2010
Attorneys for Applicants

Please charge or credit our
Account No. 03-0075 as necessary
to effect entry and/or ensure
consideration of this submission.